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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,517	04/02/2007	Alan John Morris Freeman	SCOTT PA5114	1709
27667	7590	04/25/2011	EXAMINER	
HAYES SOLOWAY P.C. 3450 E. SUNRISE DRIVE, SUITE 140 TUCSON, AZ 85718			COMLEY, ALEXANDER BRYANT	
			ART UNIT	PAPER NUMBER
			3746	
			NOTIFICATION DATE	DELIVERY MODE
			04/25/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/593,517	Applicant(s) FREEMAN, ALAN JOHN MORRIS	
	Examiner ALEXANDER B. COMLEY	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 14-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 18th, 2011 has been entered.

Status of the Claims

2. The Examiner acknowledges Applicant's amendments, arguments, and remarks filed with the Office on March 18th, 2011 in response to Final Office Action mailed by the Office on December 21st, 2010 and Advisory action mailed on March 9th 2011. Per Applicant's response, Claims 1 and 11 have been amended, while Claims 12 and 13 have been cancelled. No claims have been newly added. All other claims remain in their previously presented form. Thus, Claims 1-11 and 14-23 now remain pending for prosecution in the instant application. The Examiner has carefully considered each of Applicant's amendments and arguments, and they will be addressed below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

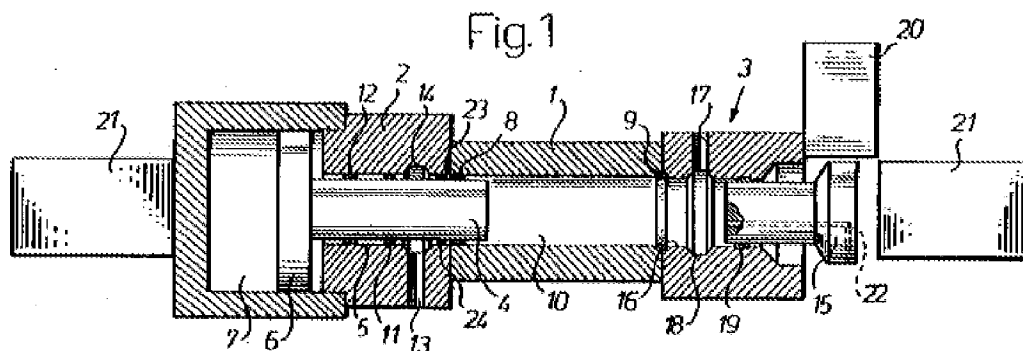
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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

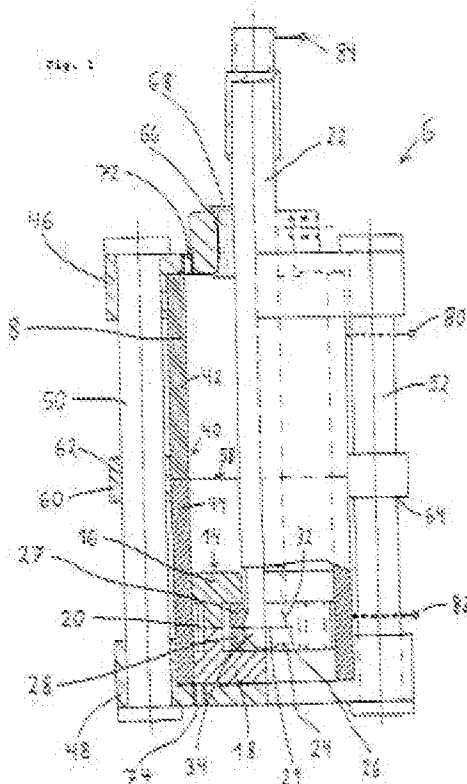
5. **Claims 1-9, 11, and 14-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 5,579,682 to Bergman et al in view of United States Patent No. 6,415,706 Poschl et al.



In regards to Independent **Claims 1 and 11**, and with particular reference to Figure 1 shown immediately above, Bergman discloses a pressure intensifier assembly for pressurizing foods such as tomato sauces, fruit-based pulps, and quenelles (See Col. 1, Lines 20-25). Bergman's device utilizes a cylinder-and-piston 1, 4 (i.e. barrel assembly), pressurize generator (4-7), end closure assemblies (2, 3), and a surrounding tension frame 21 (See Col. 6, Lines 17-36) A clamping piston 20 is further utilized between the end closure 3 and tension frame 21 and reacts against the tension frame 21 when high pressure prevails within chamber 10 (see col. 7,

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lines 4-17). Like Applicant's tension frame and clamping pistons, the tension frame/pistons (20, 21) of Bergman are designed to press/hold against the end closures (2, 3) in order to take up axial forces placed thereon during the intense pressurization created within chamber 10 (See Col. 7, lines 4-17) Bergman's intensifier also appears to operate in the same manner as Applicant's invention (See Col. 7, Line 52 – Col. 8, Line 34) However, although it would appear that Bergman's press frame 21 presses against piston 20 and end closures (2, 3), Bergman does not specifically disclose that this frame exerts a resilient axial force that preloads the closures.



However, as depicted immediately above in Figure 1, Poschl et al. (Poschl) specifically discloses a hydraulic piston-and-cylinder actuation device in which the cylinder ends are preloaded by a surrounding tie-rod frame (i.e. press frame) (see Abstract). In particular, Poschl's actuator is comprised of a cylinder 8 that is made up of two ends (42, 44) (i.e. end closures). A

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piston 14 is hydraulically driven, and forms a pressure generator that pressurizes medium within the cylinder 8 (see col. 4, lines 16-39). Most importantly, however, is Poschl's specific use of a surrounding tension frame comprised of tie rods (50, 52), and which is designed to pretension (i.e. preload) the two ends of the cylinder (see col. 4, lines 43-47; col. 5, lines 17-20) As such, Poschl makes it quite clear that it is well-known in the art of hydraulic piston-cylinder actuators to preload the cylinder ends in order to maintain a tight resilience (i.e. overbalance anticipated internal pressure loads) of the pressurized cylinder components. Doing so allows the assembly to avoid cyclic loads being repeatedly placed on the surrounding tension frame. Therefore, to one of ordinary skill desiring a longer-lasting pressure-treatment device, it would have been obvious to utilize the techniques disclosed in Poschl in combination with those seen in Bergman in order to obtain such a result. Consequently, it would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the preloading techniques of Poschl's tension frame with the hydraulic tension frame 21 of Bergman in order to obtain predictable results; those results being a longer-lasting pressure treatment device that eliminates cyclic loads.

6. In regards to dependent **Claims 2 and 14**, the tension frame/pistons 21 of Bergman clearly take the form of a clamping yoke (see Fig. 1). Regarding dependent **Claims 3 & 15**, Bergman's first and second seal assemblies (8, 9) are disposed on either end of the high pressure barrel 1 in the same manner as Applicant's claimed seals. In regards to dependent **Claims 4 & 16-17**, the pressurizing means of both Bergman and Poschl is a hydraulic piston/ram assembly (See Col. 8, Lines 3-10 of Bergman, for example) Regarding dependent **Claims 5 & 18**, the surrounding housing of Bergman's intensifier acts as a stand. Similarly, Poschl's surrounding

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tension frame (50, 52) acts as a vertically-oriented stand. In regards to dependent **Claims 6-7 & 19-20**, it can be seen in Figure 1 of Bergman that no screws are utilized in retaining the various intensifier components together. Moreover, Bergman specifically states that his structure allows for quick disassembly thereof (See Col. 5, Lines 49-54) Hence, the barrel 1 can be opened rapidly, and therefore allows for quick detachability thereof without the need to loosen threaded fasteners. Regarding dependent **Claims 8 & 21**, it can be seen in Figure 1 of Bergman that the right end closure 3 is retractable via its plunger member 15 when the press frame pistons 21 retract therefrom (See Col. 8, Lines 27-34) And finally, in regards to dependent **Claims 9 & 22**, it is clear that the pressurizing fluid lifts the piston 4 of the barrel assembly during pressurization.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

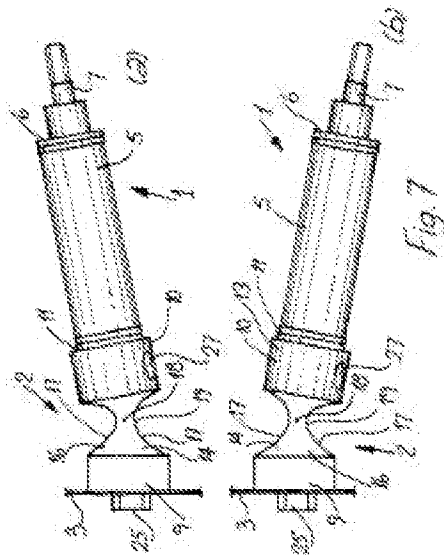
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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9. **Claims 10 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent No. 5,579,682 to Bergman et al. in view of United States Patent No. 6,415,706 Poschl et al. as applied to Claims 1-9 and 14-22 above, and further in view of United States Patent No. 5,904,089 to Jansson et al.



Neither Bergman nor Poschl appear to disclose the use of a pivoting stand for allowing the cylinder assembly to pivot with respect to the stand. However, with reference to Figure 7 pictured above, Jansson discloses the use of a hinged pivot mechanism (14-19) for allowing a ram mechanism to pivot on its base (See Col. 5, line 60 - Col. 6, Line 28) Both Bergman and Jansson are aimed at providing better ram apparatuses that provide easy access thereto.

Therefore, to one of ordinary skill desiring a more versatile ram, it would have been obvious to utilize the pivoting techniques disclosed in Jansson in combination with the Bergmann-Poschl combination in order to obtain a predictable result; that result being a pivoting ram housing that allows for better access thereto during routine maintenance.

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Response to Arguments

10. Applicant's arguments with respect to claims 1-11 and 14-23 have been considered but are moot in view of the new ground(s) of rejection.

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER B. COMLEY whose telephone number is (571)270-3772. The examiner can normally be reached on M-F 7:30am - 5:00am EST (Alternate Fridays Off). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon C. Kramer can be reached on (571)-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander B Comley/

Examiner, Art Unit 3746

/William H. Rodríguez/

Primary Examiner, Art Unit 3741

ABC